

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application. For the Examiner's convenience, a clean set of all claims is provided as Appendix A.

Listing of Claims

1. (Currently amended) A method of interfacing to a system comprising:

receiving speech input data from a user;

Identifying a language spoken by the user from the speech input data;

converting the speech input data into a first text in the identified language by

recognizing the user's speech in the speech input data based at least in part on the

language identifier;

parsing the first text to extract keywords;

automatically translating the keywords into a plurality of automatically selected

languages other than the identified language;

using the translated keywords as a command to an application;

receiving results to the command;

~~automatically summarizing the results;~~

converting the ~~summarized~~ results into a second text in a natural language

format according to the language spoken by the user; and

rendering the second text for perception by the user.

2. (Cancelled)

1 3. (Original) The method of claim 1, wherein rendering comprises converting the
2 second text into speech and rendering the speech to the user.

1 4. (Cancelled)

1 5. (Previously amended) The method of claim 1, further comprising using the
2 keywords as a search query to at least one search engine, wherein the results comprise
3 search results from the at least one search engine operating on the search query.

1 6. (Cancelled)

1 7. (Previously amended) The method of claim 1, further comprising automatically
2 translating the keywords into a plurality of automatically selected languages other than
3 the identified language and using the translated keywords as a search query to at least
4 one search engine in multiple languages, wherein the results comprise search results in
5 multiple languages from the at least one search engine operating on the search query.

1 8. (Previously amended) The method of claim 7, further comprising automatically
2 translating search results in languages other than the language spoken by the user into
3 the language spoken by the user.

1 9. (Original) The method of claim 1, wherein the application comprises a web
2 browser.

1 10. (Previously amended) The method of claim 9, wherein the web browser
2 interfaces with at least one search engine and the command comprises a search query.

1 11. (Original) The method of claim 9, wherein the web browser interfaces with a
2 shopping web site and the command comprises at least one of a purchase order and a
3 request for product information.

C/ 1 12. (Original) The method of claim 1, wherein the speech comprises
2 conversational speech.

9/10/03
13. (Currently amended) An article comprising: a storage medium having a
2 plurality of machine readable instructions, wherein when the instructions are executed
3 by a processor, the instructions provide for interfacing to a system by receiving speech
4 input data from a user, identifying a language spoken by the user from the speech input
5 data, converting the speech input data into a first text in the identified language by
6 recognizing the user's speech in the speech input data based at least in part on the
7 language identifier, parsing the first text to extract keywords, automatically translating
8 the keywords into a plurality of automatically selected languages other than the
9 identified language, using the translated keywords as a command to an application,
10 receiving results to the command, ~~automatically summarizing the results,~~ converting the

11 summarized results into a second text in a natural language format according to the
12 language spoken by the user, and rendering the second text for perception by the user.

1 14. (Cancelled)

1 15. (Original) The article of claim 13, wherein instructions for rendering comprise
2 instructions for converting the second text into speech and rendering the speech to the
3 user.

1 16. (Cancelled)

1 17. (Previously amended) The article of claim 13, further comprising instructions
2 for using the keywords as a search query to at least one search engine, wherein the
3 results comprise search results from the at least one search engine operating on the
4 search query.

1 18. (Cancelled)

1 19. (Previously amended) The article of claim 13, further comprising instructions
2 for automatically translating the keywords into a plurality of automatically selected
3 languages other than the identified language and using the translated keywords as a
4 search query to at least one search engine in multiple languages, wherein the results

5 comprise search results in multiple languages from the at least one search engine
6 operating on the search query.

1 20. (Previously amended) The article of claim 19, further comprising instructions
2 for automatically translating search results in languages other than the language spoken
3 by the user into the language spoken by the user.

1 21. (Original) The article of claim 13, wherein the application comprises a web
2 browser.

C/ 1 22. (Previously amended) The article of claim 21, wherein the web browser
2 interfaces with at least one search engine and the command comprises a search query.

1 23. (Original) The article of claim 21, wherein the web browser interfaces with a
2 shopping web site and the command comprises at least one of a purchase order and a
3 request for product information.

1 24. (Original) The article of claim 13, wherein the speech comprises
2 conversational speech.

3 25. (Currently amended) A language independent speech based user interface
2 system comprising:

3 a language identifier to receive speech input data from a user and to identify the
4 language spoken by the user;

5 at least one speech recognizer to receive the speech input data and the
6 language identifier and to convert the speech input data into a first text based at least in
7 part on the language identifier;

8 at least one natural language processing module to parse the first text to extract
9 keywords;

10 ~~at least one summarization module to automatically summarize the search~~
11 ~~results from at least one search engine operating on the search query using the~~
12 ~~extracted keywords; and~~

13 at least one language translator to automatically translate the keywords into a
14 plurality of automatically selected languages other than the identified language for use
15 as a command to an application, and to translated results to the command in languages
16 other than a language spoken by the user to the language spoken by the user; and

17 at least one natural language generator to convert the summarized results into a
18 second text in a natural language format according to the language spoken by the user.

1 26. (Original) The system of claim 25, further comprising at least one text to
2 speech module to render the second text audibly to the user.

1 27. (Currently amended) The system of claim 25, further comprising at least one
2 language translator to automatically translate the keywords into a plurality of
3 automatically selected languages for use as the a search query, and to receive results

4 ~~from the search engine and to~~ automatically translate the search results in languages
5 other than the language spoken by the user into the language spoken by the user prior
6 to summarizing the translated results and converting the summarized results into the
7 second text in a natural language format.

1 28. (Cancelled)

1 29. (Original) The system of claim 25, wherein the system is coupled to a web
2 browser.

1 30. (Previously amended) The system of claim 29, wherein the web browser
2 interfaces with at least one search engine, the keyword comprises a search query, and
3 the second text comprises search results from the at least one search engine.

1 31. (Cancelled)

1 32. (Previously amended) The system of claim 29, wherein the web browser
2 interfaces with a shopping web site and the command comprises at least one of a
3 purchase order and a request for product information.

2 33. (Currently amended) A language independent speech based search system
comprising:

3 a language identifier to receive speech input data from a user and to identify the
4 language spoken by the user;

5 at least one speech recognizer to receive the speech input data and the
6 language identifier and to convert the speech input data into a first text based at least in
7 part on the language identifier;

8 at least one natural language processing module to parse the first text to extract
9 keywords;

10 at least one search engine to use the keywords as a search term and to return
11 search results;

12 at least one language translator to automatically translate the keyword into a
13 plurality of automatically selected languages prior to input to the at least one search
14 engine to search across multiple languages, to receive results from the search engine,
15 and to automatically translate the search results in languages other than the language
16 spoken by the user into the language spoken by the user;

17 at least one automatic summarization module to automatically summarize the
18 translated search results;

19 at least one natural language generator to convert the summarized results into a
20 second text in a natural language format according to the language spoken by the user.

1 34. (Cancelled)

1 35. (Original) The system of claim 33, further comprising at least one text to
2 speech module to render the second text audibly to the user.

1 36. (Reinstated -- formerly claim #6) The method of claim 1, further comprising
2 automatically summarizing the results prior to converting the results to the second text.

1 37. (Reinstated -- formerly claim #18) The article of claim 13, further comprising
2 instructions for automatically summarizing the results prior to converting the results to
3 the second text.

1 38. (Reinstated -- formerly claim #28) The system of claim 25, further comprising
2 at least one automatic summarization module to automatically summarize the second
3 text prior to converting the second text into the natural language format.
